

INTERNATIONAL SEARCH REPORT

Application No

/GB2004/003265

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01S3/067

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01S

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 411 323 B1 (WELCH DAVID F ET AL) 25 June 2002 (2002-06-25) column 7, lines 21-25 column 8, lines 19-23	1-20, 25-31
X	US 6 445 494 B1 (PASCHOTTA RUEDIGER EBERHARD ET AL) 3 September 2002 (2002-09-03)	1-21
Y	column 31, lines 16-36; figure 17 column 30, lines 11-13	22-24
X	EP 1 113 540 A (SDL INC) 4 July 2001 (2001-07-04) column 12, lines 12-46	1-20
A	US 6 031 850 A (CHEO PETER K) 29 February 2000 (2000-02-29) the whole document	7,8
	----- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

17 November 2004

Date of mailing of the international search report

30.11.04

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel: (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Jobst, B

INTERNATIONAL SEARCH REPORT

Application No

'GB2004/003265

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/035628 A1 (KERSEY ALAN D ET AL) 20 February 2003 (2003-02-20) figure 15 -----	22-24
Y	WO 02/37625 A (CIDRA CORP) 10 May 2002 (2002-05-10) figure 1 -----	22-24
A	US 6 340 806 B1 (SVETKOFF DONALD J ET AL) 22 January 2002 (2002-01-22) abstract -----	1,2, 21-24

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2004/003265

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

Post Application Copy

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-20,25-31

Claims 1-20 and 25-31 relate to an apparatus for providing optical radiation wherein the apparatus is the features of the claims relate to structural details for providing efficient optical pumping of the light source.

2. claims: 21-24

Claims 21-24 relate to an apparatus for providing optical radiation wherein the apparatus is configured to change the wavelength of a second amplifying waveguide for modulating the optical output of the apparatus.

Pat. Available Copy

INTERNATIONAL SEARCH REPORT

Information on patent family members

Application No

/GB2004/003265

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6411323	B1	25-06-2002	US 6212310 B1 03-04-2001 US 6298187 B1 02-10-2001 US 6275632 B1 14-08-2001
US 6445494	B1	14-03-2002	US 2002030881 A1 14-03-2002 AU 5402498 A 29-06-1998 GB 2366447 A ,B 06-03-2002 WO 9825326 A1 11-06-1998 GB 2335074 A ,B 08-09-1999 US 6288835 B1 11-09-2001
EP 1113540	A	04-07-2001	US 5867305 A 02-02-1999 EP 1113540 A1 04-07-2001 CA 2242575 A1 24-07-1997 DE 69717600 D1 16-01-2003 DE 69717600 T2 17-04-2003 EP 0875083 A2 04-11-1998 JP 3567233 B2 22-09-2004 JP 2000503476 T 21-03-2000 US 5933271 A 03-08-1999 WO 9726688 A2 24-07-1997 US 5930030 A 27-07-1999 US 6081369 A 27-06-2000
US 6031850	A	29-02-2000	NONE
US 2003035628	A1	20-02-2003	US 6519388 B1 11-02-2003 US 2003021306 A1 30-01-2003 US 6363089 B1 26-03-2002 US 6229827 B1 08-05-2001 US 6621957 B1 16-09-2003 US 2003185509 A1 02-10-2003 US 2002071626 A1 13-06-2002 US 6310990 B1 30-10-2001 US 2003174948 A1 18-09-2003 US 2003072531 A1 17-04-2003 AU 9634101 A 08-04-2002 CA 2424032 A1 04-04-2002 EP 1322979 A2 02-07-2003 JP 2004510195 T 02-04-2004 WO 0227364 A2 04-04-2002 AU 3435201 A 12-06-2001 CA 2394910 A1 07-06-2001 CN 1433523 T 30-07-2003 EP 1236061 A2 04-09-2002 JP 2003515781 T 07-05-2003 WO 0140835 A2 07-06-2001 AT 265055 T 15-05-2004 AU 757885 B2 13-03-2003 AU 4164400 A 31-07-2000 BR 9915953 A 21-08-2001 CA 2353413 A1 06-07-2000 CN 1334929 T 06-02-2002 DE 69916659 D1 27-05-2004 EP 1145059 A2 17-10-2001 JP 2002533779 T 08-10-2002 NO 20012681 A 31-07-2001 WO 0039617 A2 06-07-2000

Best Available Copy

INTERNATIONAL SEARCH REPORT

Information on patent family members

Application No

/GB2004/003265

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003035628	A1	US 2003215185 A1	20-11-2003
		AU 2603602 A	15-05-2002
		WO 0237625 A2	10-05-2002
		AU 775187 B2	22-07-2004
		CA 2353504 A1	29-06-2000
		CN 1329722 T	02-01-2002
		EP 1135701 A2	26-09-2001
		AU 3996500 A	12-07-2000
		JP 2003520978 T	08-07-2003
		WO 0037969 A2	29-06-2000
		AU 6291101 A	17-09-2001
		CA 2402301 A1	13-09-2001
		CN 1439106 T	27-08-2003
		EP 1269232 A2	02-01-2003
		JP 2003526812 T	09-09-2003
		WO 0167142 A2	13-09-2001
		AU 4911101 A	17-09-2001
		CA 2402287 A1	13-09-2001
WO 0237625	A 10-05-2002	AU 2603602 A	15-05-2002
		WO 0237625 A2	10-05-2002
		US 2003174948 A1	18-09-2003
		US 2003021306 A1	30-01-2003
		US 2003072531 A1	17-04-2003
		US 2003035628 A1	20-02-2003
US 6340806	B1 22-01-2002	US 6281471 B1	28-08-2001
		AU 6811301 A	02-01-2002
		EP 1287594 A2	05-03-2003
		JP 2003536266 T	02-12-2003
		TW 513737 B	11-12-2002
		WO 0198016 A2	27-12-2001
		US 2002125228 A1	12-09-2002
		DE 60009348 D1	29-04-2004
		DE 60009348 T2	19-08-2004
		EP 1244534 A1	02-10-2002
		JP 2003518440 T	10-06-2003
		TW 478025 B	01-03-2002
		WO 0147659 A1	05-07-2001
		US 2004134896 A1	15-07-2004
		US 2004134894 A1	15-07-2004
		US 2004188399 A1	30-09-2004
		US 2002023901 A1	28-02-2002

Best Available Copy